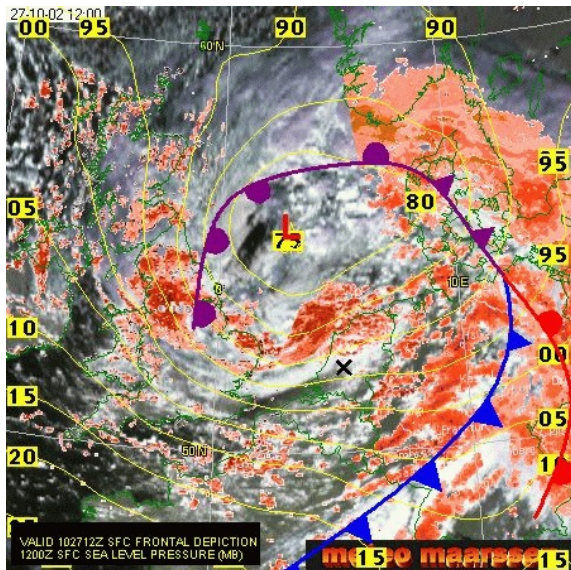meteo maarssen

Creation of basemaps
for Digital Atmosphere
with use of Geosatsignal

CREATION OF BASEMAPS FOR DIGITAL ATMOSPHERE WITH USE OF GEOSATSIGAL

This image shows the large storm over Western Europe at October 27, 2002. It gives an idea what can be done playing the right tools. A basemap is created in GeoSatSignal. In second stage are some West European radar frames added with use of a photo editor, and finally is this output used in Digital Atmosphere where Mean Sealevel Pressure and fronts are added. This can all be done by everybody, but you need at least a photo-editor with a macro/script utility to record or write your actions. Left image is a final image imported and created in Digital Atmosphere. Right side a plain map created in Digital Atmosphere with matching map setup.

Radarframes
You have to remove the background of the radarmaps. This can be done by choosing a background colour and translate it in any colour you like. Do the same with all other background colours. You get an image with only precipitation intensity and a smooth (by example pink) background. Choose any colour for your background, but not a colour simular to the rain intensity. You may translate the colours of the rain intensity on the same way. Save this map.
Open now your satellite image in your editor. Load the saved radarmap in it and make the background transparent. Move and resize the radarmap as it becomes matching clouds in the image. Do the same with radarframes from other countries of your choice and save the results. This output can be used in Digital Atmosphere to add all other information needed.

Matching frames between GeoSatSignal and Digital Atmosphere
The table on the next page shows a list with a compatible map setup for use of basemaps created in GeoSatSignal to use within Digital Atmosphere. But that is not all. Some parts of the world are not covered by a single satellite and GeoSatSignal did not offer a tool to join an Asian overview with use of Meteosat 5 and GMS 5 imagery at once. You have to make two frames (one for Meteosat and one for GMS) in the same map setup and put them together in a photo-editor. Refer to the table for best results. Choose always the nearest timeslot between both satellites images. It doesn't care if there is a leap of 30 minutes, but 3 hours or more gives poor smoothing results.

Notes
Digital Atmosphere is a trademark of WeatherGraphics; GeoSatSignal is trademark of David Taylor.
Output examples for use in Digital Atmosphere can be found at:
http://www.meteo-maarssen.8m.com/achtergrond/satelliet/satellietfoto.htm

Meteo Maarssen is an amateur weather office located in The Netherlands.

Ton Lindemann

GEOSATSIGNAL   **DIGITAL ATMOSPHERE**   **MAP SIZE**

Continents	Mer	Par	Span	Long	Lat	Scale	Width	Heigh
Europe	5	54	37	5	54	2500	450	450
Europe radar	3	54	14	3	54	968	450	450
Africa	20	0	75	20	0	6450	640	480
America North	-100	50	75	-100	50	6450	640	480
America Carribean	-80	20	30	-80	20	2750	640	480
America South	-60	-23	75	-60	-23	6450	640	480
Asia	100	50	75	100	50	6450	640	480
Australia	140	-20	75	140	-20	6450	640	480

Oceans	Mer	Par	Span	Long	Lat	Scale	Width	Heigh
Atlantic North	-40	50	70	-40	50	6075	640	480
Atlantic Central	-20	0	70	-20	0	6075	640	480
Atlantic South	-20	-50	70	-20	-50	6075	640	480
Indian North	80	0	70	80	0	6075	640	480
Indian South	70	-50	70	70	-50	6075	640	480
Pacific North	-170	50	70	-170	50	6075	640	480
Pacific East	-100	0	70	-100	0	6075	640	480
Pacific South	-150	-50	70	-150	-50	6075	640	480
Pacific West	160	0	70	160	0	6075	640	480

South and West are negative and all in full degrees.
Use 'orthographic projection' in both programs.